ProVu Communications
IP Videophone
The 2 minute guide for techies

Tim Bray

July 30, 2003

1 Introduction

This is for people who really know what they are doing, and want to get the BVP8770 working as fast as possible.

We expect that reading this you have either bought, or are about to buy the BVP8770 IP videophone. This is not intended to be a replacement for the user manual, but to get the key points across to technically aware users very quickly.

2 First of all

Plug in the power, Lan cable and external microphone (if you have one). Makesure you plug in the microphone before you turn the power on.

The IP Videophone uses the H.323 protocol.

3 If you have Real IP addresses

We mean, static globally routable IP addresses.

All the phone needs to know, is a IP address, subnet mask and default gateway. You put this in by pressing the ‘ok’ button a few times, and then pressing OK, and left arrow to get out. Just press ‘ok’ at the password.

4 If you are behind a NAT

The phone uses UDP for communication. UDP is connectionless, and so doesn't get on well with NATs. If it is at all possible, plug in the phone to the Internet side of the firewall with its own real, proper, globally routable IP address (not a private IP address).

If you must work behind a NAT, this is where it gets tricky. You need to tell the phone that it is behind a NAT, tell it what its external IP address is. 1:1 NAT is better one method. Alternatively you can use the DMZ facility of some NATs or you can do some port mappings.

If the NAT claims to be H.323 aware, then you are probably best to disable this feature. It may help you for outgoing calls, but is probably going to cause pain for incoming calls. Some H.323 aware NATs only seem to recognise voice, and not video.

4.1 Port numbers

These are the port numbers you need to map through if you are using the phone behind a NAT.

TCP: 7000-7009, 1720-1730
UDP: 8050- 8054, 8056, 8058

The port numbers printed in the user manual are incorrect for newer software version.

5 Operation tips

Use the up and down arrow keys while in a call to adjust the volume.

The bandwidth setting puts a cap on your transmit speed. So you need to have an idea what sort of connection you have, and what sort of connection the other end has. If in doubt, choose a lower setting. It works much better when you aren't pushing the network to its limits.

When entering IP address, the key puts the in. To dial quick dials, you pick up the handset, press # and then press the key for the quick dial you want.

If you want to make a test call, then call 81.144.139.34 at 256kbit/s.

6 Feedback

This document is being constantly developed. The latest version can be found at http://www.provu.co.uk/docs/ Comments or feedback is welcome and should be directed to tim@provu.co.uk.